

REMARKS/ARGUMENTS

The Office Action of November 2, 2005 has been carefully reviewed and this response addresses the Examiner's concerns stated in the Office Action. All objections and rejections are respectfully traversed.

I. STATUS OF THE CLAIMS

Claims 1, 2, 4, 6, 7, 11, 14, 19, 21, 22, 25, 29-32, 34, 41, 44, 55, 59, and 65-70 are currently pending.

Claim 4 is objected to because of an informality.

Claims 1, 2, 4, 6, 7, 11, 14, 19, 21, 22, 25, 29-32, 34, 41, 44, 55, 59, and 65-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent # 6,269,398, issued to Leong et al., on July 31, 2001, filed on April 22, 1996 (Leong), in view of United States Patent # 6,678,250, issued to Grabelsky et al., on January 13, 2004, filed on February 19, 1999 (Grabelsky).

Applicant respectfully points out that the cited reference, Leong, was published on July 31, 2001, two months after the filing date of the present application, May 29, 2001. Applicant respectfully reserves the right to file a declaration under 37 C.F.R. § 1.131 to swear behind Leong.

Applicant respectfully points out that the cited reference, Grabelsky, was published on January 13, 2004, 2 ½ years after the filing date of the present application, May 29, 2001. Applicant respectfully reserves the right to file a declaration under 37 C.F.R. § 1.131 to swear behind Grabelsky.

Claims 68-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leong, in view of Grabelsky, in further view of United States Patent # 6,775,267, issued to Kung et al., United States Patent # 6,775,267, issued on August 10, 2004, filed on December 30, 1999 (Kung).

Applicant respectfully points out that the cited reference, Kung, was published on August 10, 2004, over three years after the filing date of the present application, May 29, 2001. Applicant respectfully reserves the right to file a declaration under 37 C.F.R. § 1.131 to swear behind Kung.

Claim 4 is amended to correct informalities. No new matter has been added.

II. CLAIM OBJECTION

On page 2, the Office Action states that claim 4 is objected to because it recites “Small Network Management Protocol (SNMP)” when it should read “Simple Network Management Protocol (SNMP)”. Applicant has amended claim 4 to correct the typographical error.

III. REJECTIONS UNDER 35 USC § 103(a)

The Office Action states, on page 2, that claims 1, 2, 4, 6, 7, 11, 14, 19, 21, 22, 25, 29-32, 34, 41, 44, 55, 59, and 65-67 are rejected as being unpatentable over Leong in view of Grabelsky.

Applicant asserts that Leong and Grabelsky are not combinable because to combine them would render Leong unsatisfactory for its intended purpose. The MPEP § 2143.01(V) states that, when combining references, if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to combine the references (*In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)). In Leong, the system is permeated with polling (see Leong, col. 8, line 32 – col. 10, line 9). Leong states that the process depicted in FIG. 3c, which includes polling, is an “important aspect of the present invention” (col. 9, line 33). Because the technique of polling is so deeply integrated in Leong, to combine Leong with a system that uses another technique for determining information would clearly render Leong unsatisfactory for its intended purpose. In Grabelsky, the RTP/RTCP protocol is used to facilitate exchange of audio, video, and other data. RTP/RTCP is used for real-time transmission of data (Grabelsky, col. 4, lines 40-63), and indeed, Grabelsky states that a view of the network conditions and performance is provided in real-time, in near real-time, and daily (Grabelsky, col. 10, lines 40-45). Thus, either when an event happens or closely thereafter (real-time and near real-time), or as a regularly scheduled activity, the system of Grabelsky probes the network. Grabelsky would thus render a polling system such as Leong’s inoperable for its intended purpose because the use of polling is inconsistent with receiving data at random and unpredictable times.

Further, the MPEP § 2143.01(VI) states that if the proposed combination would change the principle of operation of the prior art, then the teaching cannot render the claims *prima facie* obvious (*In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)). Applicant asserts that the proposed combination of Leong with Grabelsky would change the principle of

operation of Leong because Leong is designed to poll routers, whereas Grabelsky is designed to accept information from network sources at random and unpredictable times.

In order for a rejection under 35 U.S.C. §103 to be sustained, the Examiner must establish a *prima facie* case of obviousness. As pointed out in MPEP § 2142, one of the three criteria to establish a *prima facie* case of obviousness is that the prior art reference(s) must teach or suggest all the claim limitations. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Further, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

As provided by the remarks set forth above with respect to combinability and below with respect to the deficiencies of Leong and Grabelsky, clearly this is not the case with the present rejection of the claims. In summary, Leong and Grabelsky, separately or in combination, do not make obvious Applicant's claimed invention at least because:

(1) Nowhere does Leong teach or suggest Applicant's claimed system for determining if at least one gateway is at a *pre-selected* processing capacity (independent claims 1, 19, and 31) because Leong is simply monitoring router utilization.

(2) Nowhere does Grabelsky disclose or suggest Applicant's claimed gateway being responsible for managing network elements because Grabelsky's system simply collects data from gateway routers and manages the *collected data*, not network elements (independent claims 1, 19, and 31).

Applicant has organized the following arguments according to cited passages in the references. Thus, all claims rejected based on a particular passage are grouped together, but argued separately where appropriate.

On pages 2-4 and 6, with respect to claims 1, 19, and 31, the Office Action states that Leong teaches a system for determining if at least one gateway is at a pre-selected processing

capacity comprising a management system capable of determining if said at least one gateway is at said pre-selected processing capacity based on the measured said amount of processing performed (Leong, Abstract, FIG. 1-20, and col. 3, line 63 – col. 4, line 34).

In the first cited passage (Leong, Abstract), Leong states that management of a router is accomplished through a logical view of the router, that commands to query the router and control the router can be entered into a router network management system, and that a single icon can be used to review the status of the router.

In the cited drawings (Leong, FIG. 1-20), Leong depicts a network including routers (FIG. 1), a logical model for the router network management system (FIG. 2), a flow diagram of the network manage process (FIG. 3a), a flow diagram of the information polled by the network management system (FIG. 3b), a flow diagram of the polling protocol information (FIG. 3c), and windows as follows: the main window (FIG. 4), set up window (FIG. 5), pop up menus (FIG. 6), a fault log window (FIG. 7), an echo test window (FIG. 8), a router performance history window (FIG. 9) a syslog viewer window (FIG. 10), a performance statistics window (FIG. 11), an ICMP window (FIG. 12), an interface profile window (FIG. 13), a routing table display window (FIG. 14), an interface configuration window (FIG. 15), an interface fault statistics window (FIG. 16), an interface fault history window (FIG. 17), a fault statistics window (FIG. 18), an interface performance history window (FIG. 19), and an interface performance by protocol window (FIG. 20).

In the second cited passage (Leong, col. 3, line 63 – col. 4, line 34), Leong states that the invention relates to providing management of routers, that the invention provides for display of a logical representation of a router, that the invention provides for allowing a network manager to issue commands to the router, that routers operate between local area networks, that a network manager is interested in the status of the routers, that SNMP and Telnet do not provide easy to use interfaces to the status information they carry, that the present invention provides a unique method to poll routers to obtain information, that the present invention provides an interface for storing and executing Telnet commands, and that the present invention provides true, at a glance, review of the status of a router.

In other words, Leong states a system in which statistics about the router, its protocols, and its interfaces are presented to a user in an easy to understand format (exemplified by FIGs. 4-20). Leong depicts in FIG. 4 a display format having an area with router information in which CPU utilization is shown, and in FIGs. 9 and 11, Leong depicts router performance history, including router CPU utilization. Nowhere, however, does

Leong teach or suggest Applicant's claimed system for determining if at least one gateway is at a *pre-selected* processing capacity (claims 1, 19, and 31) because Leong is simply monitoring router utilization. For this reason, Leong does not make obvious Applicant's claims 1, 19, and 31.

On pages 2-5, with respect to claims 1, 2, 6, 7, 11, 19, 22, 31, 32, 41, and 59, and with respect to the cited passages from Grabelsky: Abstract, col. 2, lines 8-25, and col. 2, lines 39-64,

(1) The Office Action states that Grabelsky teaches said at least one gateway being responsible for managing one or more network elements, said at least one gateway communicatively coupled with one or more network elements, said at least one gateway measuring an amount of processing usage performed said by said at least one gateway (claims 1, 19, and 31);

(2) The Office Action states that Grabelsky teaches wherein said amount of processing performed includes an amount of message handling (claim 2);

(3) The Office Action states that Grabelsky teaches wherein said at least one gateway includes code executable to track said measured amount of processing performed by said at least one gateway (claims 6, 32, and 59); and

(4) The Office Action states that Grabelsky teaches wherein said tracking step comprises the steps of tracking an amount of different types of processing including handling of different types of messages from one or more network elements (claims 7, 11, 22, and 41).

In the first cited passage (Grabelsky, Abstract), Grabelsky states that monitoring and managing the performance of a real-time network is possible by using information that gateway routers collect including delay, loss, and jitter statistics on a per-connection basis, that RTCP can be used to relay performance information to a monitoring site, and that the monitoring can be done on a local level and over various time scales.

In the second cited passage (Grabelsky, col. 2, lines 8-25), Grabelsky states that a gateway router collects network connection statistics to determine the packet delivery performance of individual network connections, and the overall quality of the network, that the network statistics collected at the local level can be used for both local and overall network monitoring, and that the monitoring provides average network conditions and highlights trouble spots.

In the third cited passage (Grabelsky, col. 2, lines 39-64), Grabelsky states the network performance is organized into databases and analyzed, that the network is organized

according to a hierarchical grouping of gateway devices called clusters, that gateways within clusters exchange data with each other and the cluster includes a cluster monitor that monitors the performance between two gateways in the cluster, that there are different levels of clusters that follow specific grouping rules.

In other words, Grabelsky states a system of gateway routers that are grouped so that monitoring can be accomplished at a local level as well as at a network-wide level.

Grabelsky states, in the first cited passage, that the system manages network performance, but describes a system that manages network performance *information* (col. 3, lines 36-44).

With respect to claims 1, 19, and 31, nowhere does Grabelsky disclose or suggest Applicant's claimed gateway being responsible for managing network elements because Grabelsky's system simply collects data from gateway routers and manages the *collected data*, not network elements. Thus, Grabelsky cannot make obvious Applicant's claims 1, 19, and 31.

With respect to claim 2, as well as claims 6, 32, and 59, Grabelsky states that connections, packet delivery performance, quality, overall network performance, local network performance and conditions are monitored, but nowhere does Grabelsky disclose or suggest Applicant's claimed measuring an amount of message handling performed by a gateway because Grabelsky is monitoring activities external to the router gateway, but not activities within the gateway router itself, such as the amount of message handling it is performing. The difference can be illustrated by an example. In the system of Grabelsky, local network performance, for example, can be monitored by examining the amount of time it takes for messages to travel between one gateway router and another within a cluster, by determining the time the message leaves one gateway router and arrives at another gateway router. If Grabelsky were performing Applicant's claimed step of monitoring the amount of message handling at a gateway, Grabelsky would be tracking not only the time of the message's arrival, but also the number of messages arriving in combination with the number of messages leaving, also in combination with the amount of processing time required for the message handling. None of Grabelsky's described statistics encompass Applicant's claimed measuring an amount of message handling performed by a gateway because each described measurement – connections (up or down), packet delivery performance (time required for packet transfer), quality (number of packet errors), overall network performance (total message transit time from source to destination, local network performance (message transit time between gateway routers) and conditions (status of gateway routers) – involves

monitoring activities external to the gateway router, not within the gateway router itself. For this reason, Grabelsky does not make obvious Applicant's claim 2, nor Applicant's claims 6, 32, and 59 for the same reason.

With respect to claims 7, 11, 22, and 41, Grabelsky does not disclose or suggest Applicant's claimed count of one or more types of processing performed by a gateway because, as discussed previously, Grabelsky's monitoring is limited to activities external to the gateway. For this reason, Grabelsky does not make obvious Applicant's claims 7, 11, 22, and 41.

On page 4, with respect to claim 4, the Office Action states that Leong teaches wherein said at least one gateway includes a Small network Management Protocol (SNMP) gateway responsible for managing one or more SNMP network elements, and wherein said amount of message handling includes handing of SNMP messages (Leong, col. 7, lines 49-76).

In the cited passage (Leong, col. 7, lines 49-76), Leong states that a client specifies to the server which router it is to manage in an SNMP command string, that the client stores historical information and manages values such as polling values and threshold values to control the display. In other words, in the system of Leong, the client controls the router through the server through the use of SNMP commands. Applicant's claim, on the contrary, an SNMP gateway for managing network elements. The Office Action states that Leong does not teach a gateway being responsible for managing one or more network elements, and therefore Leong cannot make obvious Applicant's claim 4.

On pages 4-7, with respect to claims 7, 11, 22, 34, 41, 44, 65, 66, and 67, and with respect to the cited Leong's FIGs. 1-14,

(1) The Office Action states that Leong teaches wherein said tracking step comprises the steps of executing software code by each of said one or more gateways to computer said amount of processing performed, said software code including code implemented within an Application Program Interface (API) (claims 7, 11, 22, and 41);

(2) The Office Action states that Leong teaches wherein said tracking means includes software code implemented within an Application Program Interface (API) executable to increment a first count to track said amount of processing performed, wherein said API includes functionality that can be invoked to maintain a second count of one or more types of processing, wherein said software code, upon occurrence of a type of processing, invokes said functionality of said API to increment said second count for said one or more types of

processing, and wherein said software code invokes said functionality by passing a descriptor of said type of processing to said API, and wherein said API maintains a third count for said descriptor (claim 34); and

(3) The Office Action states that Leong teaches communicative coupling to a usage management system, wherein said gateway is operable to communicate said amount of processing performed usage to said usage management system (claim 44).

In the cited drawings (Leong, FIGs. 1-14), Leong depicts system block diagrams (FIGs. 1 and 2), method flow charts (FIGs. 3a-3c), and display examples (FIGs. 4-14). FIGs. 1 and 2 depict block diagrams of systems with routers, clients, and servers. FIG. 3a states a process that includes the steps of polling the router and displaying information from the polled router as long as the session is active. FIG. 3b states a process that includes the steps of polling the router for basic information, protocol information, and interface information. FIG. 3c states a process for protocol polling. FIG. 4 depicts the main screen that includes a pane that provides basic router information, a pane that provides protocol information, and a pane that provides interface information, all in iconic form, for a particular router. FIG. 5 depicts detailed interface information for a particular router including the type of the interface, the status of the interface, and a visual measure of the interface's fault rate and performance during the polling interval. FIG. 6 depicts icons giving basic router information. FIG. 7 depicts a fault log for the interfaces for a router giving the severity, the interface, and the time. FIG. 8 depicts a test result. FIG. 9 depicts router performance history including historic CPU utilization, peak CPU usage, time of peak CPU usage, router packets dropped/second, and peak value/time with respect to packets dropped. FIG. 10 depicts a system log viewer to display information in the system log file of the router such as error severity, error message, and time of error. FIG. 11 depicts router performance statistics such as free memory, packets dropped, and CPU utilization. FIG. 12 depicts an example of the display of details about a particular protocol at a particular router such as the number of messages received, the number of errors, the number of messages transmitted, and other such information. FIG. 13 depicts an example of the display of details about the interfaces into a particular router according to interface number including security level, address supplier, address discovery method, and other such information. FIG. 14 depicts a routing table according to destination and interface number, including next hop, route type, gateway protocol, and other such information.

With respect to claims 7, 11, 22, 34, and 41, nowhere does Leong disclose or suggest Applicant's claimed code implemented within an API because Leong does not discuss implementation whatsoever in the diagrams, nor an API elsewhere. For Leong to have disclosed or suggested Applicant's claimed API, Leong would have to describe programming call interfaces, or, as Applicant has done, describe where in the configuration an API would be used (see Applicant's Specification FIGs. 3A and 3B). Although Leong goes into great detail to describe the polling process and the menu selection items, nowhere does Leong state how a programmer would implement the functionality described, including the use of APIs, and thus, Leong cannot make obvious Applicant's claims 7, 11, 22, 34, and 41.

Further, and with respect to claims 7, 11, 22, 34, 41, and 44, Leong's diagrams do not disclose or suggest Applicant's claimed functionality that can increment and maintain a count of one or more types of processing performed by the gateway because Leong's counts include utilization (FIG. 4, router, protocol and interface), polling time interval (FIG. 5), SNMP timeout time (FIG. 5), performance indicator thresholds for interfaces (FIG. 5), the number of packets dropped at the router (FIGs. 9 and 11), free memory (FIG. 11), CPU utilization (FIGs. 9 and 11), messages received by protocol (FIG. 12), errors by protocol (FIG. 12), unreachable destinations received (FIG. 12), time exceeded messages received (FIG. 12), source quenches received (FIG. 12), redirects received (FIG. 12), echo requests received (FIG. 12), messages transmitted (FIG. 12), unreachable destinations transmitted (FIG. 12), time exceeded messages transmitted (FIG. 12), source quenches transmitted (FIG. 12), redirects transmitted (FIG. 12), and parallel routes (FIG. 14), none of which can be even broadly interpreted to include Applicant's claimed types of processing performed by the gateway. For those reasons, Leong cannot make obvious Applicant's claims 7, 11, 22, and 41.

On page 5, with respect to claim 25, the Office Action states that Leong teaches wherein said invoking step comprises the step of passing a descriptor of said type of processing usage to said API (Leong, FIGs. 12-20, col. 12, lines 13-67).

In the cited drawings (Leong, FIGs. 12-20), Leong depicts examples of protocol and interface performance and fault statistics displays. FIG. 12 depicts an example of the display of details about a particular protocol at a particular router such as the number of messages received, the number of errors, the number of messages transmitted, and other such information. FIG. 13 depicts an example of the display of details about the interfaces into a particular router according to interface number including security level, address supplier,

address discovery method, and other such information. FIG. 14 depicts a routing table according to destination and interface number, including next hop, route type, gateway protocol, and other such information. FIG. 15 depicts an example interface configuration. FIGs. 16 and 18 depict examples of interface fault statistics. FIG. 17 depicts an example of a token ring fault history showing the percentiles of various types of faults that occurred. FIG. 19 depicts an example of token ring performance history includes % bandwidth, peak values and times, packets discarded, etc. FIG. 20 depicts an example of a display of performance by protocol.

In the cited passage (Leong, col. 12, lines 13-67), Leong states the description of menu options for the protocol area of the main menu, including the description of three buttons and a graph, that the menu depends upon the protocol being displayed, that the Internet Protocol (IP) menu includes showing IP interface profiles, routing tables, address resolution protocol, and accounting table, that the fault button provides a selection of fault history or current statistics, that the performance button provides a selection of statistics, history, performance by protocol, performance by interface, or a display of active processes, that the interface area of the main display shows one row for each interface, and each row has 3 buttons, and that the buttons are displayed as symbols that represent the type of interface shown by the row.

The cited diagrams and cited passage do not disclose or suggest Applicant's claimed passing a descriptor of said type of processing to said API for the reasons stated above with respect to claims 7, 11, 22, 34, 41, and 44, in particular that Leong does not disclose types of processing nor an API. Thus, Leong cannot make obvious Applicant's claim 25.

On page 7, with respect to claims 68-70, the Office Action states that Leong in view of Grabelsky does not explicitly teach usage management system charges a user for said at least one gateway a fee based on said amount of processing performed, however Kung teaches usage management system charges a user for said at least one gateway a fee based on said amount of processing performed (Kung, FIG. 7c, col. 5, lines 44-63, col. 4, lines 15-23, col. 2, lines 30-31, col. 1, lines 9-15)

In the cited diagram (Kung, FIG. 7c), Kung depicts an example of a screen on which is displayed, or from which a user can select a preferred service provider for a segment of a communication.

In the first cited passage (Kung, col. 5, lines 44-63), Kung states that the broadband network can include hubs and/or networks, that may be connected to external networks,

various components, administration centers, secure networks, billing systems, and centralized control centers.

In the second cited passage (Kung, col. 4, lines 15-23), Kung states that the networks of Kung are either circuit-switched (end-to-end dedicated path) or packet-switched (data packet can follow a plurality of paths between source and destination).

In the third cited passage (Kung, col. 2, lines 30-31), Kung states his invention as a method of billing a variable bit rate communication between a first terminal and a distant terminal to a broadband subscriber at the first terminal.

In the fourth cited passage (Kung, col. 1, lines 9-15), Kung states that his invention relates to method for billing Internet broadband communications between or among users, that his invention relates to providing multi-network access and least cost routing.

In other words, Kung provides for determining a least cost alternative for network communications, and billing for the communication at the default quality of service and according to the required bit rate after the termination of the communication. On the contrary, Applicant's claim a means for charging a fee based on the amount of processing performed by a gateway, which is different from Kung because Kung's billing relates to data rate and quality of service, whereas Applicant's fee is charged based on the amount of processing performed by a gateway. To calculate Kung's bill would require information such as the actual bit rate of the transmission, and the number of errors that occurred during the transmission. To calculate Applicant's fee would require determining the amount of processing in the gateway and performing a computation of the fee based on that statistic. Clearly these concepts, required data, and computations are different, and thus, Kung cannot make obvious Applicant's claims 68-70.

Since Leong, Grabelsky, and Kung, either separately or in combination, do not make obvious Applicant's independent claims 1, 19, and 31, nor their dependent claims 2, 4, 6, 7, 11, 14, 55, and 68 (claim 1), 21, 22, 25, 29, 30, 59, 65-67, and 69 (claim 19), and 32, 34, 41, 44, and 70 (claim 31), Applicant's independent claims 1, 19, and 31, and their dependent claims 2, 4, 6, 7, 11, 14, 21, 22, 25, 29, 30, 32, 34, 41, 44, 55, 59, and 65-70, are not made obvious by Leong, Grabelsky, and Kung, and a rejection under 35 U.S.C. § 103(a) is inappropriate. Applicant asserts that independent claims 1, 19, and 31, and their dependent claims 2, 4, 6, 7, 11, 14, 21, 22, 25, 29, 30, 32, 34, 41, 44, 55, 59, and 65-70, are now in condition for allowance. Applicant respectfully requests the withdrawal of the rejection under 35 U.S.C. § 103(a) with regards to amended independent claims 1, 19, and 31, and

their dependent claims 2, 4, 6, 7, 11, 14, 21, 22, 25, 29, 30, 32, 34, 41, 44, 55, 59, and 65-70, for the reasons set forth above.

IV. CONCLUSION

In view of the fact that the motivation to combine Leong and Grabelsky is defeated because the references, if combined, would render Grabelsky unsatisfactory for its intended purpose, Applicant respectfully urges that Leong and Grabelsky are not sufficient to render the presently claimed invention unpatentable under 35 U.S.C. § 103(a). Further, in view of the absence of Applicant's claimed invention in the Leong, Grabelsky, and Kung references as set forth above, Applicant respectfully urges that Leong, Grabelsky, and Kung are not sufficient to render the presently claimed invention unpatentable under 35 U.S.C. 103(a).

Independent claims 1, 19, and 31 are believed to be in condition for allowance in view of the deficiencies in Leong, Grabelsky, and Kung, and the inability to combine Leong and Grabelsky. All dependent claims depend upon allowable independent claims, and are therefore believed to also be in condition for allowance.

Although no new fees are anticipated, the Commissioner for Patents is authorized to charge additional fees or credit overpayment to Deposit Account No. 50-1078.

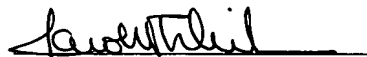
The following information is presented in the event that a call may be deemed desirable by the Examiner:

JACOB ERLICH (617) 854-4000.

Respectfully submitted,
Robert Gary, Applicant

Date: February 2, 2006

By:


Jacob Erlich
Reg. No. 24,338
Attorney for Applicant